REMARKS/ARGUMENTS

Claims 1, 3-8, 10-15, and 17-21 are pending in this application. By this Amendment, Applicant amends claims 1, 3, 8, 14, and 17.

Claims 1, 3-8, 10-15 and 17-21 were rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. Particularly, the Examiner alleged that the recitation of "one of the omitted portions is aligned with the through hole and another of the omitted portions is aligned with the microstrip line" is indefinite because it is misdescriptive. The Examiner alleged that Fig. 2 of the originally filed specification shows that there is only one omitted portion 32 and two through holes 30.

Although Applicant disagrees with the Examiner's allegations, in order to advance prosecution, Applicant has amended claims 1 and 14 to recite one omitted portion and a through hole in one of the grounding conductor layers.

With respect to claim 8, which the Examiner included in the rejection under 35 U.S.C. § 112, second paragraph, Applicant respectfully submits that claim 8 is clear and definite since claim 8 does NOT recite two omitted portions.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 1, 3-8, 10-15 and 17-21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Mandai et al. (US Patent 5,227,739). Applicant respectfully traverses the rejection of claims 1, 3-8, 10-15 and 17-21.

Claim 1 has been amended to recite:

> "A resonator comprising:
> a multi-layer substrate having an upper and lower surface and including at least two grounding conductor layers and a plurality of dielectric layers, one of the at least two grounding conductor layers being disposed on the lower surface of the multi-layer substrate;
> a strip line disposed between the at least two grounding conductor layers;
> a microstrip line disposed on the upper surface of said multi-layer substrate; and
> a through hole formed in said dielectric layers to connect said strip line to said microstrip line; wherein

> **portions of the one of the at least two grounding conductor layers that is closest to said microstrip line are omitted to define an omitted portion and a through hole in the one of the at least two grounding conductor layers that is closest to said microstrip line;**
> the through hole in the one of the at least two grounding conductor layers is aligned with the through hole in said dielectric layers and the omitted portion is aligned with the microstrip line; and
> **the through hole in the one of the at least two grounding conductor layers is spaced from the omitted portion such that the through hole in the one of the at least two grounding conductor layers is disposed outside of a periphery of the omitted portion."** (emphasis added)

Applicant's claim 1 recites the features of "portions of the one of the at least two grounding conductor layers that is closest to said microstrip line are omitted to define an omitted portion and a through hole in the one of the at least two grounding conductor layers that is closest to said microstrip line" and "the through hole in the one of the at least two grounding conductor layers is spaced from the omitted portion such that the through hole in the one of the at least two grounding conductor layers is disposed outside of a periphery of the omitted portion." Applicant's claims 8 and 14 recite features which are similar to the features recited in Applicant's claim 1, including the above emphasized features. With the improved features of claims 1, 8 and 14, Applicant has been able to provide a resonator that minimizes degradation of the Q factor, accurately adjusts the frequency, and has a greatly reduced size and profile thereof (see, for example, the second full paragraph on page 3 of the Specification).

The Examiner alleged that Mandai et al. teaches each and every feature recited in Applicant's claims 1, 8 and 14, including a through hole V1 in a dielectric layer 2f, and rectangular portions of the grounding conductor layer 7 that is closest to the microstrip line 9 that are omitted. The Examiner further alleged that the omitted portions are aligned with the through hole V1 and the microstrip line 9. Applicant respectfully disagrees.

First, contrary to the Examiner's allegations, at best, Mandai et al. teaches **only** on omitted portion (the rectangular omitted portion in the grounding conductor layer 7),

and certainly fails to teach or suggest "portions of the one of the at least two grounding conductor layers that is closest to said microstrip line are omitted to define **an omitted portion and a through hole** in the one of the at least two grounding conductor layers that is closest to said microstrip line" (emphasis added) as recited in Applicant's claim 1, and similarly in Applicant's claims 8 and 14.

Second, as clearly seen in Fig. 4 of Mandai et al., the microstrip line 9 and the through hole V1 are both aligned with the **single** rectangular omitted portion of the grounding conductor layer 7 such that the through hole is **completely disposed within** the rectangular omitted portion. Thus, Mandai et al. certainly fails to teach or suggest "the through hole in the one of the at least two grounding conductor layers **is spaced from** the omitted portion such that the through hole in the one of the at least two grounding conductor layers **is disposed outside** of a periphery of the omitted portion" (emphasis added) as recited in Applicant's claim 1, and similarly in Applicant's claims 8 and 14.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 8, and 14 under 35 U.S.C. § 102(b) as being anticipated by Mandai et al.

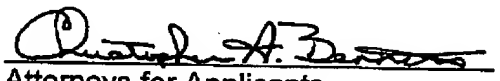
Accordingly, Applicant respectfully submits that none of the prior art of record, applied alone or in combination, teaches or suggests the unique combination and arrangement of elements recited in claim 1, 8, and 14 of the present application. Claims 2-7 depend upon claim 1 and are therefore allowable for at least the reasons that claim 1 is allowable. Claims 9-13 depend upon claim 8 and are therefore allowable for at least the reasons that claim 8 is allowable. Claims 15-21 depend upon claim 14 and are therefore allowable for at least the reasons that claim 14 is allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: June 17, 2004



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